





# Crystalline Repository Project Area Phase

## BACKGROUND

The Crystalline Repository Project's draft Area Recommendation Report identified 12 proposed potentially acceptable sites for field studies during the Project's Area Phase. Following public review and comment on this document, a final Area Recommendation Report (ARR) will be issued during the summer 1986.

Area Phase efforts will focus on the acquisition of new geologic, environmental, and socioeconomic data in the 12 identified areas. The area screening process will use the DOE Site Siting Guidelines as the basic criteria for identifying candidate sites, although the approach will not be the same as that used in the region-to-area screening process. An Area Characterization Plan (ACP), which will be completed in consultation with States and Indian Tribes, will specify the data to be collected and field work that will be conducted during the Area Phase. The major objective of the ACP will be to describe the plans for the acquisition of field data. A final ACP will be issued prior to the initiation of Area Phase field investigations.

Acquisition and evaluation of field data will make it possible to identify potential repository sites within the large areas, and to compare among those sites. This will lead to nomination and recommendation of candidate sites for detailed site characterization for a potential second repository.

## AREA PHASE ACTIVITIES

Area Phase activities will include 3 to 4 years of field studies in the 12 identified areas. Detailed geological, environmental, and socioeconomic data will be gathered to determine the suitability of an area for detailed site characterization.

Geologic work will involve such activities as exploratory drilling, sampling, and well construction; core recovery, analyses, and description; well logging; geophysical surveys; hydrologic testing and modeling; aerial photographs and satellite imagery interpretations; seismic monitoring; and

hydrologic monitoring, projected population, seasonal population fluctuation, labor availability, regional economics, and land use compatibility considerations.

Interim reports will be issued during the Area Phase that document the results of data collection efforts. These reports will be issued to the States, Indian Tribes, and the public.

## STATE, INDIAN TRIBE, AND PUBLIC INVOLVEMENT

States and Indian Tribes will be involved in the development of DOE's Area Phase plans and methodologies. In addition to the day-to-day interaction between DOE and the States and Indian Tribes, workshops will be held to develop plans and methodologies for the Area Phase. In addition, local governments will be kept informed of project developments as the Area Phase proceeds.

Further, DOE hopes to negotiate consultation and cooperation agreements with the affected States and Indian Tribes. Such agreements, where negotiated, will govern Federal-State/Tribal relations.

DOE intends to comply with all State permitting requirements, as well as State and local regulations consistent with DOE's responsibilities under the Nuclear Waste Policy Act. DOE also will identify State and local laws and regulations that may conflict with DOE's responsibilities under the Act. DOE will work closely with appropriate officials to fully address these issues.

Finally, the process used to acquire land for the exploratory shafts and repository will depend on who owns the property at the candidate sites. It is too early in the site selection process to determine how land may be acquired for the crystalline sites. However, in the first repository program, the U. S. Corps of Engineers will assist DOE in acquiring any privately-owned lands needed for site characterization and repository development. Land controlled by another Federal agency or a State will require a formal transfer of title.





the Secretary of Energy's recommendation to the President of sites that should undergo detailed site characterization as potential second repository locations. In accordance with the Nuclear Waste Policy Act, each nomination will be accompanied by an environmental assessment, which will be issued in draft form for review and comment. In accordance with current DOE planning, this recommendation to the President is scheduled to be made in 1991. Presidential approval of any of the crystalline rock sites as a potential second repository would result in more detailed site characterization work at the approved site or sites for approximately 4 to 6 years.

Prior to the initiation of site characterization at any site, DOE will issue a site characterization plan, which will include, among other requirements, a description of the candidate site, the site characterization activities to be conducted, plans for decontamination and decommissioning, and any other information that may be required by the NRC. After completion of site characterization, DOE will recommend one site from among all characterized sites to the President for approval as the second repository site. This recommenda-

tion will be accompanied by an environmental impact statement. This environmental impact statement will be prepared pursuant to the Nuclear Waste Policy Act of 1982 and the National Environmental Policy Act of 1969.

For the second repository, DOE may consider (1) sites identified as potentially acceptable but not nominated for the first repository; (2) sites characterized but not chosen for the first repository site; and (3) sites found potentially acceptable from rock formations not previously studied in the first repository selection process.

The environmental impact statement would be followed by the President's recommendation to Congress of a single site for location of the second repository in 1998. A license application will be made to the Nuclear Regulatory Commission (NRC) after the site designation becomes effective. The present estimate for the time required to construct a repository ready for receipt and emplacement of waste is approximately 6 years. Before construction of a second repository, the DOE must receive Congressional authorization.

## **OCRWM**

### **Office of Civilian Radioactive Waste Management**

In 1982 Congress passed the Nuclear Waste Policy Act that established the nation's nuclear waste program. The Office of Civilian Radioactive Waste Management was created by the act to fulfill the Congressional mandate. The program is funded by the generators and consumers of nuclear electricity and by the nation's defense activities. For further information about the national program, write to: Office of Civilian Radioactive Waste Management, U. S. Department of Energy, Mail Stop RW-40, Washington, D.C. 20585; phone (202) 252-2835.

For additional information about specific site studies, write to:

#### Crystalline Project

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#### Salt Project

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#### Tuff Project

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#### Basalt Project

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